

OIPE

#2

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/915,060

DATE: 08/06/2001

TIME: 11:05:19

Input Set : A:\ES.txt

Output Set : N:\CRF3\08062001\I915060.raw

ENTERED

3 <110> APPLICANT: Vlaams Interuniversitair Instituut voor Biotechnol
 5 <120> TITLE OF INVENTION: Novel internal ribosome entry site, vector containing same
 and the uses

6 thereof

8 <130> FILE REFERENCE: 2676-4976US

C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/915,060

C--> 10 <141> CURRENT FILING DATE: 2001-07-25

10 <150> PRIOR APPLICATION NUMBER: 99200216.2

11 <151> PRIOR FILING DATE: 1999-01-26

13 <160> NUMBER OF SEQ ID NOS: 51

15 <170> SOFTWARE: PatentIn version 3.1

17 <210> SEQ ID NO: 1

18 <211> LENGTH: 222

19 <212> TYPE: DNA

20 <213> ORGANISM: Homo sapiens

22 <400> SEQUENCE: 1

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25 tcaggttctg aggaagaaga ggaggaggag gaagaggagg aggaggaagg gagcaccagt 120

27 gaagaatcag aggaggaaga ggaagaggag gaggaggaga ccggcagcaa ctctgaggag 180

29 gcatcagagc agtctgccga agaagtaagt gaggaagaaa tg 222

32 <210> SEQ ID NO: 2

33 <211> LENGTH: 222

34 <212> TYPE: RNA

35 <213> ORGANISM: Homo sapiens

37 <400> SEQUENCE: 2

38 gacaucagcg acagcgagag gaagaccagc ucggccgagu ccucgucagc agaaucaggc 60

40 ucagguucug aggaagaaga ggaggaggag gaagaggagg aggaggaagg gagcaccagu 120

42 gaagaaucag aggaggaaga ggaagaggag gaggaggaga ccggcagcaa cucugaggag 180

44 gcaucagagc agucugccga agaaguaagu gaggaagaaa ug 222

47 <210> SEQ ID NO: 3

48 <211> LENGTH: 2471

49 <212> TYPE: DNA

50 <213> ORGANISM: Homo sapiens

52 <220> FEATURE:

53 <221> NAME/KEY: misc_feature

54 <222> LOCATION: (906)..(1128)

55 <223> OTHER INFORMATION: The IRES-activity containing sequence

58 <220> FEATURE:

59 <221> NAME/KEY: misc_feature

60 <222> LOCATION: (1)..(2471)

61 <223> OTHER INFORMATION: PITSLRE protein kinase (p110pitslre) (isoform alfa2-2)

64 <400> SEQUENCE: 3

65 atacaggaag tgacgatact tttggcgcg cgggttgctg tttcttctct ggctccggga 60

67 ccggcgcgcg cgggcgcgcg acggggcgcg gcgtagggtg ttttaactca aatgggtgat 120

69 gaaaaggact cttggaaagt gaaaacttta gatgaaattc ttcaggaaaa gaaacgaagg 180

71 aaggaacaag aggagaaagc agagataaaa cgcttaaaaa attctgatga ccgggattcc 240

73 aagcgggatt cccttgagga gggggagctg agagatcact gcatggagat cacaataagg 300

75 aactccccgt atagaagaga agactctatg gaagacagag gagaagaaga tgattctttg 360

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77 gccatcaaac caccacagca aatgtctcgg aaagaaaaag ttcacacag aaaagatgaa 420
79 aagagaaaaag agaaaaagca tgctagagtg aagaagaaaag aaagagagca cgaacgtcgg 480
81 aaacgacatc gagaagaaca ggataaagct cgccgggaat gggaaagaca gaagagaagg 540
83 gaaatggcaa gggagcattc caggagagaa aggggggaatg atggcgtgtg cctcttcagg 600
85 gaccgcttgg agcagttaga aaggaagcgg gagcgggagc gcaagatgcg ggagcagcag 660
87 aaggagcagc gggagcagaa ggagcgcgag cgccggggcg aggagcggcg caaggagcgg 720
89 gaggcccgca gggagtggtc tgcacatcac cgaacgatga gagaggacta cagcgacaaa 780
91 gtgaaagcca gccactggag tcgcagcccg cctcgccgc cgccgggagcg gttcaggttg 840
93 ggagacggcc ggaagccagt aaaagaagag aaaatggaag aaagggacct gctgtccgac 900
95 ttacaggaca tcagcgacag cgagaggaag accagctcgg ccgagtcctc gtcagcagaa 960
97 tcaggctcag gttctgagga agaagaggag gaggaggaag aggaggagga ggaaggagc 1020
99 accagtgaag aatcagagga ggaagaggaa gaggaggagg aggagaccgg cagcaactct 1080
101 gaggaggcat cagagcagtc tgccgaagaa gtaagtgagg aagaaatgag tgaagatgaa 1140
103 gaacgagaaa atgaaaacca cctcttggtt gttccagagt caggttcga ccgagattcc 1200
105 ggggagagtg aagaagcaga ggaagaagtg ggtgaggga cgccgcagag cagcgccctg 1260
107 acagagggcg actatgtgcc cgactccctt gccctgtcgc ccacgagct caagcaggag 1320
109 ctgccaagt acctgccggc cctgcagggc tgccggagcg tcgaggagtt ccagtgcctg 1380
111 aacaggatcg aggagggcac ctatggagtg gtctacagag caaaagacaa gaaaacagat 1440
113 gaaattgtgg ctctaaagcg gctgaagatg gagaaggaga aggagggctt cccgatcacg 1500
115 tcgctgaggg agatcaacac catcctcaag gccagcatc ccaacatcgt caccgttaga 1560
117 gagattgtgg tgggcagcaa catggacaa atctacatcg tgatgaacta tgtggagcac 1620
119 gacctcaaga gcctgatgga gaccatgaaa cagcccttcc tgccagggga ggtgaagacc 1680
121 ctgatgatcc agctgctgcg tgggtgaaa cacctgcacg acaactggat cctgcaccgt 1740
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125 gggctggcg gggagtagcg atccctctg aaggectaca ccccggtcgt ggtgaccctg 1860
127 tggtagcgcg cccagagct gctgcttggt gccaggaat actccacggc cgtggacatg 1920
129 tggtagtggt gttgcatctt cggggagctg ctgactcaga agcctctgtt ccccggaag 1980
131 tcagaaatcg atcagatcaa caaggtgttc aaggatctgg ggaccctag tgagaaaatc 2040
133 tggcccggt acagcgagct cccagcagtc aagaagatga ccttcagcag acaccctac 2100
135 aacaacctcc gcaagcgctt cggggctctg ctctcagacc agggcttcga cctcatgaac 2160
137 aagttcctga cctacttccc cgggaggagg atcagcgctg aggacggcct caagcatgag 2220
139 tatttcgag agacccccct ccccatcgac cctccatgt tccccacgtg gcccgccaag 2280
141 agcagcagc agcgtgtgaa gcggggcacc agcccgaggc cccctgaggg aggcctgggc 2340
143 tacagccagc tgggtgacga cgacctgaag gagacgggct tccaccttac caccacgaac 2400
145 cagggggcct ctgccgcggg ccccggttc agcctcaagt tctgaaggtc agagtggacc 2460
147 ccgtcatggg g
150 <210> SEQ ID NO: 4
151 <211> LENGTH: 30
152 <212> TYPE: DNA
153 <213> ORGANISM: Homo sapiens
155 <400> SEQUENCE: 4 30
156 gacatcagcg acagcgagag gaagaccagc
159 <210> SEQ ID NO: 5
160 <211> LENGTH: 468
161 <212> TYPE: DNA
162 <213> ORGANISM: Homo sapiens
164 <400> SEQUENCE: 5 60
165 cacgaacgtc ggaaacgaca tcgagaagaa caggataaag ctgccggga atgggaaaga 120
167 cagaagagaa gggaaatggc aaggagcat tccaggagag aaagggggaa tgatggcgtg

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169 tgcctcttca gggaccgctt ggagcagtta gaaaggaagc gggagcggga ggcgaagatg 180
171 cgggagcagc agaaggagca gcgggagcag aaggagcgcg agcggcgggc ggaggagcgg 240
173 cgcaaggagc gggaggcccg cagggaagtg tctgcacatc accgaacgat gagagaggac 300
175 tacagcgaca aagtgaagc cagccactgg agtcgcagcc cgcctcggcc gccgcgggag 360
177 cggttcgagt tgggagacgg ccggaagcca gtaaaagaag agaaatgga agaaagggac 420
179 ctgctgtccg acttacagga catcagcgac agcgagagga agaccagg 468
182 <210> SEQ ID NO: 6
183 <211> LENGTH: 660
184 <212> TYPE: DNA
185 <213> ORGANISM: Homo sapiens
187 <400> SEQUENCE: 6
188 cacgaacgtc ggaaacgaca tcgagaagaa caggataaag ctgcgcggga atgggaaaga 60
190 cagaagagaa gggaaatggc aaggagcagc tccaggagag aaagggggaa tgatggcgtg 120
192 tgcctcttca gggaccgctt ggagcagtta gaaaggaagc gggagcggga ggcgaagatg 180
194 cgggagcagc agaaggagca gcgggagcag aaggagcgcg agcggcgggc ggaggagcgg 240
196 cgcaaggagc gggaggcccg cagggaagtg tctgcacatc accgaacgat gagagaggac 300
198 tacagcgaca aagtgaagc cagccactgg agtcgcagcc cgcctcggcc gccgcgggag 360
200 cggttcgagt tgggagacgg ccggaagcca gtaaaagaag agaaaatgga agaaagggac 420
202 ctgctgtccg acttacagga catcagcgac agcgagagga agaccagctc ggccgagtcc 480
204 tcgtcagcag aatcaggctc aggttctgag gaagaagagg aggaggagga agaggaggag 540
206 gaggaagggg gcaccagtga agaatcagag gaggaagagg aagaggagga ggaggagacc 600
208 ggcagcaact ctgaggaggc atcagagcag tctgccgaag aagtaagtga ggaagaaatg 660
211 <210> SEQ ID NO: 7
212 <211> LENGTH: 38
213 <212> TYPE: DNA
214 <213> ORGANISM: Artificial Sequence ✓
216 <220> FEATURE:
217 <223> OTHER INFORMATION: 5' primer ✓
219 <400> SEQUENCE: 7
220 tgctctagag gaattcgaag tgacgatact tttggcgc 38
223 <210> SEQ ID NO: 8
224 <211> LENGTH: 42
225 <212> TYPE: DNA
226 <213> ORGANISM: Artificial Sequence
228 <220> FEATURE:
229 <223> OTHER INFORMATION: 3' primer
231 <400> SEQUENCE: 8
232 tgctctagac caagcttcac gtccatcaag ccgacctcag aa 42
235 <210> SEQ ID NO: 9
236 <211> LENGTH: 30
237 <212> TYPE: DNA
238 <213> ORGANISM: Artificial Sequence
240 <220> FEATURE:
241 <223> OTHER INFORMATION: in frame NotI
243 <400> SEQUENCE: 9
244 agcctcaagt tcgcggccgc agagtggacc 30
247 <210> SEQ ID NO: 10
248 <211> LENGTH: 21
249 <212> TYPE: DNA

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250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: primer
255 <400> SEQUENCE: 10
256 gaggaagaag cgagtgaaga t
259 <210> SEQ ID NO: 11
260 <211> LENGTH: 22
261 <212> TYPE: DNA
262 <213> ORGANISM: Artificial Sequence
264 <220> FEATURE:
265 <223> OTHER INFORMATION: primer
267 <400> SEQUENCE: 11
268 gacagcgaga aagaccagct cg
271 <210> SEQ ID NO: 12
272 <211> LENGTH: 35
273 <212> TYPE: DNA
274 <213> ORGANISM: Artificial Sequence
276 <220> FEATURE:
277 <223> OTHER INFORMATION: 5'-end primer
279 <400> SEQUENCE: 12
280 ctagtctaga aaagtgaaaa cttagatga aattc
283 <210> SEQ ID NO: 13
284 <211> LENGTH: 34
285 <212> TYPE: DNA
286 <213> ORGANISM: Artificial Sequence
288 <220> FEATURE:
289 <223> OTHER INFORMATION: 3'-end primer
291 <400> SEQUENCE: 13
292 tgcattgccat ggatgtcgtt tccgacgttc gtgc
295 <210> SEQ ID NO: 14
296 <211> LENGTH: 35
297 <212> TYPE: DNA
298 <213> ORGANISM: Artificial Sequence
300 <220> FEATURE:
301 <223> OTHER INFORMATION: 3'-end primer
303 <400> SEQUENCE: 14
304 tgcattgccat ggtcctctct catcggttcgg tgatg
307 <210> SEQ ID NO: 15
308 <211> LENGTH: 31
309 <212> TYPE: DNA
310 <213> ORGANISM: Artificial Sequence
312 <220> FEATURE:
313 <223> OTHER INFORMATION: 5'-end primer
315 <400> SEQUENCE: 15
316 gcacgaacgt cggaacgac atctagacta g
319 <210> SEQ ID NO: 16
320 <211> LENGTH: 35
321 <212> TYPE: DNA
322 <213> ORGANISM: Artificial Sequence

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Input Set : A:\ES.txt
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324 <220> FEATURE:
325 <223> OTHER INFORMATION: 5'-end primer antisense 35
327 <400> SEQUENCE: 16
328 catgccatgg tcttcctctc gctgtcgctg atgtc
331 <210> SEQ ID NO: 17
332 <211> LENGTH: 32
333 <212> TYPE: DNA
334 <213> ORGANISM: Artificial Sequence
336 <220> FEATURE:
337 <223> OTHER INFORMATION: 5'-end primer sense 32
339 <400> SEQUENCE: 17
340 ctagtctaga catcaccgaa cgatgagaga gg
343 <210> SEQ ID NO: 18
344 <211> LENGTH: 40
345 <212> TYPE: DNA
346 <213> ORGANISM: Artificial Sequence
348 <220> FEATURE:
349 <223> OTHER INFORMATION: 5'-end primer sense 40
351 <400> SEQUENCE: 18
352 gacatcagcg acagcgagag gaagaccagc tctagactag
355 <210> SEQ ID NO: 19
356 <211> LENGTH: 26
357 <212> TYPE: DNA
358 <213> ORGANISM: Artificial Sequence
360 <220> FEATURE:
361 <223> OTHER INFORMATION: double-stranded oligonucleotide ✓ 26
363 <400> SEQUENCE: 19
364 cgcgtggcga gattttcagg agtcac
367 <210> SEQ ID NO: 20
368 <211> LENGTH: 26
369 <212> TYPE: DNA
370 <213> ORGANISM: Artificial Sequence
372 <220> FEATURE:
373 <223> OTHER INFORMATION: double-stranded oligonucleotide 26
375 <400> SEQUENCE: 20
376 tcgagtgaact cctgaaaatc tcgcc
379 <210> SEQ ID NO: 21
380 <211> LENGTH: 40
381 <212> TYPE: DNA
382 <213> ORGANISM: Artificial Sequence
384 <220> FEATURE:
385 <223> OTHER INFORMATION: E-tag probe 40
387 <400> SEQUENCE: 21
388 acgcggttcc agcggatccg gatacggctc cggcgcacct
391 <210> SEQ ID NO: 22
392 <211> LENGTH: 8
393 <212> TYPE: RNA
394 <213> ORGANISM: Artificial Sequence
396 <220> FEATURE:

8/6/01

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/915,060

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L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

8/6/01